Abstract

[0127]   A method and apparatus for dynamically balancing the loading of data

storage facilities containing video data files to facilitate the transfer of the video

data files or portions of video data files from a file server system to client computing

5   system. The method for balancing a loading of a storage device attached to

multiple computing begins by acquiring a listing of locations and loading of all

segments of a requested data object including all copies of the segments of the

requested data object. Those storage devices containing copies of each segment

of the data object having a least loading are selected. If the loading of the storage

10   devices is greater than the maximum loading for the storage devices, the segment

is divided into sub-segments and stored to storage devices with minimum loading.

The presence of all segments of the requested data object is determined. If there

are missing segments of the requested data object, each of those missing

segments is assigned a file identification and file location, such that those missing

15   segments are assigned to data storage devices having the least loading. The

missing segments are retrieved from a back-up storage device. The segments of

the requested data object are then transferred to a requesting computer system.